

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of) Examiner: C. HARRISON
G. GEGNER)
Serial No.: 10/516,376) Art Unit: 2628
Filed: November 30, 2004) Confirmation: 1408
For: **METHOD AND OPTIMIZING**)
THE PRESENTATION ON A)
DISPLAY SCREEN OF)
OBJECTS OF A USER)
INTERFACE WHICH CAN BE)
FREELY POSITIONED AND)
SCALED BY MEANS OF)
CONTROL ELEMENTS)
Date of Examiner's Answer:)
May 11, 2010)
Attorney Docket No.:) Cleveland, OH 44114
PHDE020139US /PKRZ 201244US01) June 30, 2010

REPLY BRIEF

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Reply Brief is responsive to the Examiner's Answer of May 11, 2010. This Brief is responsive to new points raised in the Examiner's Answer.

EXAMINER'S ANSWER SECTIONS (1)-(8) and (11)

The Appellant and the Examiner are in agreement in conjunction with Sections (1)-(8) and (11) of the Appeal Brief and the Examiner's Answer. Accordingly, no further comments on these sections are appropriate at the present time.

CERTIFICATE OF ELECTRONIC TRANSMISSION

I certify that this **REPLY BRIEF** and accompanying documents in connection with U.S. Serial No. 10/516,376 are being filed on the date indicated below by electronic transmission with the United States Patent and Trademark Office via the electronic filing system (EFS-Web).

July 7 2010
Date

Patricia A Heim
Patricia A. Heim

EXAMINER'S ANSWER SECTION (9)

The Grounds of Rejection Section (9) as presented in the Examiner's Answer appears to be identical to the Grounds of Rejection set forth in the Final Rejection. Because no new issues are raised in Section (9), the applicant is not entitled to address the points made by the Examiner.

EXAMINER'S ANSWER SECTION (10) – REPLY TO RESPONSE TO ARGUMENT**A. Claims 3 and 24-26**

The present application is particularly concerned with medical monitors which display the current status of a plurality of physiological conditions. A patient monitor has limited real estate on the display screen. In the example shown in Figure 2, a large variety of physiological conditions are monitored. When a clinician is particularly interested in one of the conditions, the clinician hovers a cursor over it, causing it to expand, but in such a manner that it does not overlap the other display boxes. As shown in Figures 3 and 4, expanding the selected box or object enables additional physiological information to be displayed. Conversely, shrinking the other boxes or objects such that they are not overlapped by the enlarged box can cause the amount of displayed physiological information to be contracted. When eliminating physiological data from the display, there is a pre-established hierarchy which dictates the order in which the physiological information is eliminated.

Claim 3 calls for optimally filling the available display screen surface. This is achieved by suppressing less important details of the object contents when changing the mode of display. This is done while avoiding mutual overlapping of the objects. The objects are ordered in a hierarchy, which ordering can be changed.

McComb (US 6,111,573) is concerned with displaying the text within a button at a user selected size (abstract, last two lines). Depending on the size of the user's display versus that of a web-page designer's, and the font size preferences of the user relative to those of the web-page designer, various adjustments must be made. Specifically, the buttons can be made bigger to accommodate the font size of the text which they contain. Column 10, lines 13-29 and 35-40 referenced by the Examiner discuss what happens when the font size relative to the screen size is so large that the boxes or graphical objects do not fit. Specifically, non-essential text in

the button label is deleted and, if necessary, less important graphical components or buttons are eliminated completely. Similarly, column 11, lines 55-65 describe that as buttons or graphical objects are enlarged, one keeps a running tally to see how much screen space is left. Once these decisions are made, the mode of display is fixed or set.

Thus, the denoted language of McComb does not disclose a method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by control elements by means of a predetermined calculation rule in such a manner that objects can be automatically changed in dependence on object contents, selected preferred settings, and available display resource on the display screen. Nor does it disclose changing the mode of display. Nor does it disclose avoiding mutually overlapping objects.

Accordingly, it is submitted that claim 3 and claims 24-26 dependent therefrom distinguish patentably over the references of record.

B. Claim 24

Claim 24 calls for the objects to be windows which contain patient monitoring information. McComb, of course, does not disclose these limitations. Hochstedler (US 6,707,476) discloses a patient monitor which has a display screen. Hochstedler does not have the problem of a web page designer designing with one font size on one size screen and a user who wants to display the web page in a different font size on a different sized screen. Rather, the size of the medical monitor display screen is known when the layout is designed. If one were to combine what Hochstedler fairly teaches to the reader of McComb, one would put labels 45 into the button 500 of McComb. The patient monitoring information is dynamically changing information; whereas, the buttons of McComb have preassigned text. Moreover, as shown, for example, in Figures 8, 10, and 12 of Hochstedler, resizing creates mutually overlapping objects, contrary to the requirements of parent claim 3 of the present application.

Accordingly, it is submitted that claim 24 distinguishes patentably over the references of record.

C. Claims 25 and 26

Claim 25 calls for designating one object, enlarging the designated object, and resizing the other objects to avoid overlapping without reducing the other objects below the minimum readable size. Columns 7 and 8, lines 11-22 referenced by the Examiner and Figure 7 do not describe designating one object. As discussed above, in medical monitors, it is advantageous to allow the clinician to designate one of the objects or boxes and have its view expanded for further study while other views are resized. By contrast, in McComb, the boxes or objects are displayed in whatever size the McComb system decides and are fixed in that size. One displayed object cannot be designated, nor does designating an object of McComb enlarge it while shrinking the other buttons or objects of McComb. Accordingly, it is submitted that claims 25 and 26 are not anticipated by McComb.

D. Claims 7, 19, and 30

The Examiner asserts that Hochstedler teaches temporarily displaying an object in an enlarged form. By contrast, column 1, lines 12-25 and column 3, lines 55-65 referenced by the Examiner disclose that the monitor of Hochstedler enables the clinician to create custom display formats. These sections do not address temporarily enlarging one of the boxes. It should also be noted that the dialog box 160 illustrated in Figure 8 and described at column 8, lines 30-42 is not an enlargement of one of the blocks already on the display. By comparing the titles of the dialog boxes shown in Figure 8 and the other Figures with an illustrated dialog box, it will be noted that this dialog box is not an enlargement of one of the boxes shown in one of the displays without a dialog box.

Moreover, the dialog box of Hochstedler is superimposed over, i.e., overlaps and obscures the other objects on the display. Thus, neither Hochstedler nor McComb disclose or teach temporarily enlarging a displayed object without overlapping other displayed objects, all while maintaining optimal filling of the available display screen.

Accordingly, it is submitted that claim 7 and claims 19 and 30 dependent therefrom distinguish patentably over the references of record.

E. Claim 19

The Examiner is reminded that a dependent claim, such as dependent claim 19, is read as including all of the limitations of its parent claim, here claim 7. Thus, claim 19, via its parent claim 3, does require that the temporary enlargement be done while avoiding mutual overlapping as set forth in line 9 of its parent claim 7.

F. Claims 2, 22, and 23

Claim 22 calls for, in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object and repositioning and rescaling the displayed objects using the calculation rule. By contrast, column 5, lines 25-65 referenced by the Examiner describe a very different procedure. In this section of Hochstedler, the user creates a plurality of different layouts in advance which are stored in a memory. More specifically, a medical monitor can be connected with various sensors and types of sensors. Each of the different preselected user-defined layouts contemplates a different collection of sensors connected with the monitor. Whatever collection of sensors is connected with the monitor, the monitor uses the corresponding (or most nearly corresponding) predefined display layout. Thus, Hochstedler teaches selecting among predefined display layouts rather than repositioning and rescaling the displayed objects using a calculation rule.

Accordingly, it is submitted that claim 22 and claims 2 and 23 dependent therefrom are not anticipated by and distinguish patentably over Hochstedler.

G. Claim 2

Claim 2 calls for the objects to be arranged within a fixed hierarchy in order to enable substituting objects based on the relative hierarchical level.

Column 7, lines 5-10 and column 6, lines 45-55 of Hochstedler, referenced by the Examiner, relate to the situation alluded to above in which none of the predefined windows is a perfect match for the collection of sensors which are connected to the monitor. These sections discuss how Hochstedler proposes to decide which of the predefined layouts is the closest. Column 7, lines 40-45 explain that the

different types of displays are more important in different circumstances. Hence, when deciding which of the predefined display formats is closest, the displays corresponding to some of the sensors that are connected to the monitor are weighted more heavily than others. Column 5, lines 25-30 are merely introductory and indicate that the sensors which are connected to the monitor are not necessarily always the same. These sections of column 7, previously discussed, provide the detailed explanation as to how Hochstedler decides which of the predefined display formats to use when sensors are added or deleted.

Accordingly, it is submitted that claim 2 is not anticipated by Hochstedler.

H. Claim 23

Claim 23 calls for generating a cursor on the display screen, moving the cursor on the display screen using a user input device, and in response to touching an object with the cursor, temporarily enlarging the touched object.

By contrast, the sections of Hochstedler addressed by the Examiner teach that the user can design custom display layouts. It is submitted that there is nothing in Hochstedler which teaches or suggests that when custom designing a display layout, touching one of the object blocks would, could, or should, cause that object block to temporarily enlarge.

Accordingly, it is submitted that claim 23 distinguishes patentably over the references of record.

I. Claim 31

Claim 31 calls for an interface which dynamically varies patient data and displays the patient data in objects on the display screen by implementing a calculation rule. The calculation rule (1) substitutes, repositions, and rescales the displayed objects in response to one of the displayed objects ceasing to contain relevant patient data, (2) positions and scales the displayed objects using the calculation rule to automatically change object contents, settings, and available resources on the display screen, and (3) avoids overlapping of the displayed objects.

By contrast, Hochstedler has a plurality of predefined display layouts. As discussed above in connection with column 7, the calculation described in Hochstedler selects the most similar of the predefined display formats.

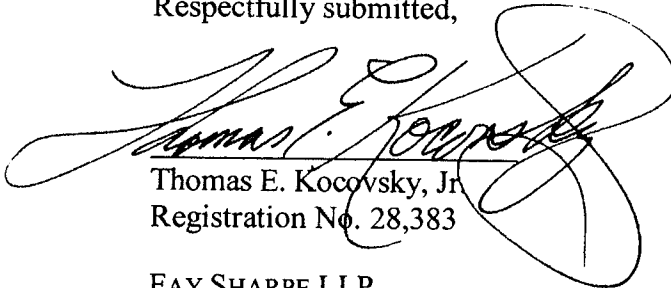
Accordingly, it is submitted that claim 31 is not anticipated by Hochstedler.

CONCLUSION

For the reasons set forth above, in the Appeal Brief and in the additional rebuttal set forth above, it is submitted that claims 2, 3, 7, 19, 22-26, 30, and 31 are not anticipated by and distinguish patentably and unobviously over the references of record.

An early Decision reversing the Examiner's rejections of all claims is requested.

Respectfully submitted,

A large, stylized handwritten signature in black ink, which appears to read "Thomas E. Kocovsky, Jr.", is written over the printed name and registration number.

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